### **Construction Site Safety**

Public safety is the primary concern of the Santa Clara Valley Water District and our contractors. Please observe the directions of traffic safety personnel (flag persons) and signs at the site.





- Watch for dump trucks and construction traffic while in the area of Lenihan Dam and Lexington Reservoir
- Do not enter fenced areas, closed trails or equipment storage areas
- Use road shoulders when using Alma Bridge Road across the dam spillway
- Trail closures are in effect 24/7

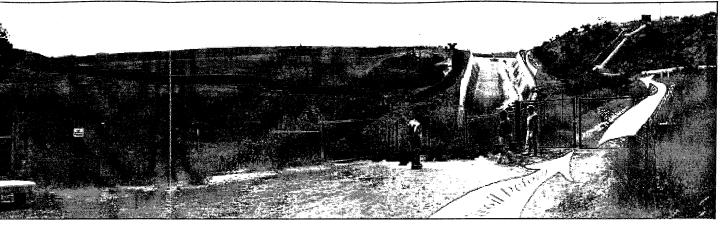


Photo of Lenihan Dam face showing the closed trails in red and the new detour route in green

# **Detour**

Tentative project schedule as of September 26, 2007

In late September, 2007, the increase in construction traffic to and from the tunnel boring site will necessitate the closing of the trail across the dam face. An alternate trail next to the spillway will be available for pedestrians

and bicyclists to use. The dam face trail will remain closed for about two years. The detour (shown in green in the photo above), will remain open during this time. Public access to other trails in the foothills will remain open. Please visit the county parks website at: www.parkhere.org (Lexington Reservoir County Park) to see the other multi-use trails available in the area.

# **Project Timeline**

The project schedule for the Lenihan Dam Outlet replacement is a complex orchestration of multiple jobs being done concurrently in order to complete the construction with the least amount of disruption to trail and reservoir users. The critical effort which has the tightest schedule is the outlet (drain) shaft work at the bottom of the reservoir. Because the work cannot begin until the reservoir bottom is exposed, it is critical that the work

area be drained and remain dry through the summer of 2008. The project schedule calls for the concrete shaft to be complete so the tunnel work can meet the drain shaft in July 2008. Project updates will be posted at the Water District website, www.valleywater.org, so everyone can monitor the progress. Lenihan Dam Outlet Lenihan Dam Project begins! **Project Complete!** Trail closes please use detour ~Fall 2009 Trail across dam face reopens ~Sept. 2009 Reservoir draining begins - water will be used for groundwater recharge (if drain work has been completed within one season) Reservoir may need to be kept at a reduced level if spring rains or uncontrollable construction delays prevent completion of the drain shaft within a single season. Reservoir will be kept as low as 400 acre/feet capacity to allow drain shaft work at bottom of reservoir Winter rain runoff begins to refill Lexington Reservoir 2009 2007 2008 Aug Prepare work area at base of dam Creek flows maintained by pumping water over Tunnel boring and blasting work creates a new tunnel on east side of the creek under St. Josephs Hill the spillway Construction trailers and fencing arrive at Tunnel boring machine brought to the site unnel "break through" to boat ramp parking lot Tunnel boring or blasting continues 24/7 inside the mountain ★ the reservoir outlet shaft Work storage and work staging areas at top of dam Trail across dam are enclosed with fencing

- Gravel spoils from the tunnel are collected and hauled off-site as needed

Work begins on excavating a new drain shaft at the bottom of the reservoir

- $^{ullet}$  A concrete lined drain shaft will be dua at the reservoir bottom.
- The tunneling work and the drain shaft work will "meet" in ~late July 2008
- · Work also begins on the water intake which runs along reservoir boftom to the water's edge

#### Work on reservoir drain pipe, valves and control buildings begins

- \* A new 54" exposed reservoir drain pipeline is fixed into the new tunnel
- \* New hydraulic valves and actuators installed within the tunnel and control buildings
- New block buildings will be constructed at the base of the dam and in the boat ramp ramp parking lot
- A new 8" "low-flow" pipeline is also installed in the new tunnel
- Control building and outlet construction continues through summer 2009

## Boring and blasting through the hill

The new outlet pipe will be installed in a large concrete-lined tunnel to be dug through the hillside east of Highway 17.

A boring machine will be used initially to dig a tunnel entrance. Small directed explosive charges, placed by our explosive experts will be used to dig the balance of the tunnel. The multiple small charges will fracture the bedrock for clearing. These small blasts will not be felt at the surface.

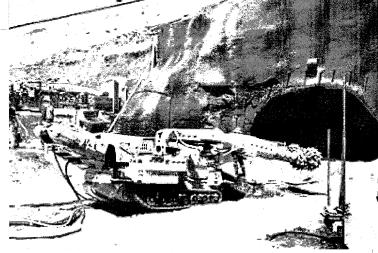


Photo above shows a "Road Header" boring machine, similar to the one scheduled to begin the tunnel boring in November 2007



After a few weeks of boring, the "Road Header" machine will be replaced with controlled blasting by explosive specialists. Photo at left shows the highly trained explosive contractors placing multiple small charges that will fracture the bedrock.

### For more information:

For more information on this construction project, call Senior Project Manager **Donna Collins** at **(408) 265-2607**, ext. **2572**, or e-mail, dcollins@valleywater.org.

For more general information on Water District operations and outreach, call **Gerry Uenaka** at **(408) 265-2607**, ext. **2237**, or e-mail, guenaka@valleywater.org.

Ito ay listahan ng impormasyon galing sa Santa Clara Valley Water District upang ipagbigay alam sa inyo ang proyekto na kasalukuyang isinasagawa sa lugar na ito. Para sa karagdagang impormasyon, mangyaring tumawag sa (408) 265-2607 extension 3714.

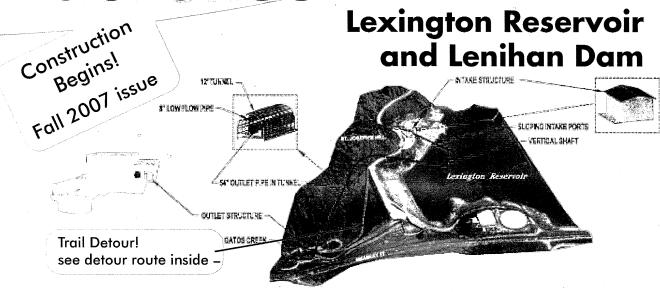
Esta hoja informativa del Distrito de Aguas del Valle de Santa Clara (Santa Clara Valley Water District) es para informarle de un proyecto de construcción que se está llevando a cabo actualmente en esta zona. Si desea más información sobre este proyecto, por favor llame al (408) 265-2607, extensión 2297.

此份聖塔克拉谷水利局 (Santa Clara Valley Water District) 的工程說明書是為讓您了解目前正在進行的一項施工工程。要了解工程的詳細情形,請致電 (408) 265-2607 轉分機 2631。

Tờ tin tức này của Nha Cấp Nước Santa Clara Valley (Santa Clara Valley Water District) nhằm thông báo cùng quý vị về dự án xây dựng đang được tiến hành trong khu vực này. Muốn biết thêm chi tiết về dự án, xin gọi (408) 265-2607, số chuyển tiến (ext) 2488

Santa Clara Valley Water District

# fact sheet



The Lenihan Dam Outlet Project (at Lexington Reservoir) began in September, 2007. After many years of planning and design, the project to replace the aging outlet pipe for this reservoir has begun. Early project staging work can be seen at the boat ramp parking lot as construction fencing, office trailers and equipment begin to arrive. The first phase of work requires the rerouting of the trail on the dam face. Construction equipment will be using the trail for the transfer of equipment and supplies to the base of the dam. The narrow area at the base of the dam will be hub of the tunnel boring and blasting operation for the next year and a half. In order to create more area for equipment, construction materials, workers, and piles of bedrock; a flat area will be created next to the existing water outlet. The public will see equipment traveling to the base of the dam and will also see pumps placed in the reservoir to maintain uninterrupted water flow into Los Gatos Creek. The floating temporary pumps in the reservoir will pour water over the spillway for Vasona Reservoir and the wildlife downstream.

The outlet pipe for Lexington Reservoir is getting old and has been repaired several times over the years. This project will construct a new outlet pipe, actuating valves and intake structure. A new tunnel will be dug through Saint Joseph's Hill (on the east side of the dam) and will come up through the bottom of the reservoir sometime next year. The tunnel will contain a new outlet pipe and new operating valves for this reservoir.

The early phases of the project will include tunnel boring and the trucking of tunnel debris from the site. The paved trail across the face of the dam will be closed until late 2009. Please visit our website, www.valleywater.org to view tunnel progress and project updates.

### Look Inside -

- Trail detour
- Construction timeline
- Safety first!
- Boring and blasting through the hill

Santa Clara Valley Water District